

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. **(Currently Amended)** A light emitting diode (LED), comprising:
at least one LED chip directly mounted on a base of high heat conductivity;
~~wherein the base is mounted directly on a circuit board;~~
wherein the LED chip is electrically connected to an applied power supply through ~~the circuit~~ a circuit board and the LED chip has a transparent medium layer disposed thereon;
wherein a base top surface acts as a light reflective surface or a light reflective surface is provided around the base;
and wherein ~~the circuit board is provided on or around the base.~~
2. **(Original)** The LED according to claim 1, wherein, at least one screw or screw hole is provided on or in the base bottom to mechanically connect the base to a heat sink.
3. **(Original)** The LED according to claim 1, further comprising a light reflector at front of the LED chip.
4. **(Original)** The LED according to claim 1, wherein, the transparent medium is optical glue and a lens.
5. **(Original)** The LED according to claim 1, wherein, the LED chips are a plurality of LED chips emitting the same color light or different color light, the chips are connected to each other in a serial or/and parallel form.

6. (Original) The LED according to claim 1, wherein, the base is a metal base, an ultra-high heat conductivity tube or an assembly of a metal base and ultra-high heat conductivity tube under the metal base.

7. (Currently Amended) The LED according to claim 3, wherein, an angle between the light reflecting surface and ~~a LED~~an LED axis is an angle from 10° to 70°.

8. (Original) The LED according to claim 4, further comprising light converting material in the optical glue or between the optical glue and the lens.

9. (Currently Amended) ~~A~~An LED lamp including at least one LED according to claim 1, comprising:

a heat sink;

at least one LED mechanically connected to the heat sink through screws or screw holes on or in the base bottom of the LED;

a driving circuit including an electrical connector, to which outgoing leads of the LEDs are connected; and

a transparent bulb housing mounted over the LED.

10. (Original) The LED lamp according to claim 9, wherein, the electrical connector is a double-leg bayonet lamp head, multi-leg bayonet lamp head or a screw lamp head.

11. (Original) The LED lamp according to claim 9, wherein, the transparent housing is a transparent, colored or scattering bulb housing made of glass or plastic.

12. (Original) The LED lamp according to claim 9, wherein, a light converting material layer is coated on the inner surface of the bulb housing.

13. (Original) The LED lamp according to claim 9, wherein, the heat sink has heat dispersing flanges on it.

14. **(Currently Amended)** The LED lamp of claim 13, wherein, the heat sink has a single heat dispersing gyroidal flange or a plurality of gyroidal heat dispersing flanges.

15. (Original) The LED lamp according to claim 13, wherein, the inner surface of the heat sink is a light reflection surface.

16. (Original) The LED lamp according to claim 15, wherein, the inner surface is cylindrocircular or parabolic.

17-19. (Canceled)